

**COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Piedmont Regional Office**

STATEMENT OF LEGAL AND FACTUAL BASIS

DuPont Teijin Films
P.O. Box 411
Hopewell, Virginia 23860
Permit No. PRO-50418

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, DuPont Teijin Films has applied for a Title V Operating Permit for its Hopewell, Virginia facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: _____ Date: _____

Air Permit Manager: _____ Date: _____

Regional Permit Manager: _____ Date: _____

FACILITY INFORMATION

Permittee/Facility

DuPont Teijin Films
111 Discovery Drive
P.O. Box 411
Hopewell, Virginia 23860

Responsible Official

Mr. Donald L. Weaver
Plant Manager

Facility Contact

Mr. Wade B. Lanning
Environmental Engineer
(804) 530-9456

County-Plant No.: 51-041-00073

SOURCE DESCRIPTION

SIC Code 2821 – DuPont Teijin Films Division operates a polymer film manufacturing facility in Hopewell, Virginia. A variety of products used in the production of a wide range of consumer products and product packaging are manufactured at the facility.

COMPLIANCE STATUS

The facility is inspected once a year. The facility reports that they are currently in compliance with all applicable requirements. This is confirmed by the latest inspection, dated December 5, 2003, where the facility was judged to be in compliance at the time of the inspection.

EMISSIONS INVENTORY:

A summary of DuPont Teijin Film's most recent annual emissions is shown below. Emission levels are expected to increase with production.

PLANTWIDE EMISSIONS SUMMARY [TONS PER YEAR]	
CRITERIA POLLUTANTS	2003 ACTUAL EMISSIONS
Particulate Matter (PM10)	16.90
Nitrogen Oxides (NO2)	34.30
Sulfur Dioxide (SO2)	6.26
Carbon Monoxide (CO)	24.41
Volatile Organic Compounds (VOC)	108.66

The permitted capacity of the DuPont Teijin Films Facility is above the major source levels for Volatile Organic Compounds (VOCs) and is subject to Title V permitting requirements.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

Equipment to be operated consists of:

Polymer Manufacturing and Wastewater Operations, including the following:

Reference No.	Equipment Description	Maximum Capacity
0110	One (1) Hotwell	12,300 gallons
1051	One (1) Main Cooling Tower	15,700 gallons per minute
0120	One (1) Polymer Plant Cooling Tower	600 gallons per minute
1028	One (1) Effluent pit	18,000 gallons
1061	One (1) Equalization Basin	180,000 gallons
1029	One (1) Collection Sump	3,800 gallons
1062	One (1) Bio-treatment Plant(Two Aeration Basins; 220,000 gallons each)	440,000 gallons
0139	One (1) Effluent Tank	6,700 gallons
1027	One (1) Still Wash Tank	174,000 gallons
1026	One (1) Incinerator Pre-Burn Tank	8,000 gallons
1006	One (1) Coen Model #215 Wastewater Incinerator	4 gallons/minute
0124-0125	Two (2) Virgin Glycol Storage Tanks	21,100 gallons each
0129-0134	Six (6) Recovered Glycol Storage Tanks	4100 gallons each
0136	One (1) Blended Glycol Storage Tank	21,100 gallons
0151-0152	Two (2) Ethylene glycol stills and associated ejector vents	5,000 gallons each
0137-0138	Two (2) DMT Storage Tanks	37580 gallons each
0126-0128	Three (3) Crude Glycol Tanks	21,300 gal each
0101	Two-Stage Polymer Reactor System L1, including but not limited to one EI batch reactor (with a total operating vapor space of 190 cubic feet), one capacity vessel, one methanol/ethylene glycol distillation column, one autoclave batch reactor, and two condensers/heat exchangers	1000 gals/batch (raw materials)
0102	Two-Stage Polymer Reactor System L2, including but not limited to one EI batch reactor (with a total operating vapor space of 190 cubic feet), one capacity vessel, one methanol/ethylene glycol distillation column, one autoclave batch reactor, and two condensers/heat exchangers	1000 gals/batch (raw materials)
0103	Two-Stage Polymer Reactor System L3, including but not limited to one EI batch reactor (with a total operating vapor space of 190 cubic feet), one capacity vessel, one methanol/ethylene glycol distillation column, one autoclave batch reactor, and two condensers/heat exchangers	1000 gals/batch (raw materials)
0121	One (1) Methanol Receiver vessel	1475 gallons

Reference No.	Equipment Description	Maximum Capacity
0122-0123	Two (2) Methanol Storage Tanks	13,000 gallons each
0104	Two-Stage Polymer Reactor System L4, including but not limited to one EI batch reactor (with a total operating vapor space of 190 cubic feet), one capacity vessel, one methanol/ethylene glycol distillation column, one autoclave batch reactor, and two condensers/heat exchangers	1000 gals/batch (raw materials)

Industrial Boiler and Process Heater Operations, including the following:

Reference No.	Equipment Description	Maximum Capacity
1001	Cleaver Brooks Model DL52E distillate oil/natural gas-fired boiler (common stack with #1002)	51 MMBtu/hr
1002	Cleaver Brooks Model DL52E distillate oil/natural gas-fired boiler (common stack with #1001)	51 MMBtu/hr
1003	Cleaver Brooks Model DL48E distillate oil/natural gas-fired boiler	47 MMBtu/hr
1004	Struther-Wells distillate oil/natural gas-fired Dowtherm heater	14 MMBtu/hr
1005	Struther-Wells distillate oil/natural gas-fired Dowtherm heater	14 MMBtu/hr

Film Line Coating Operations, including the following:

Reference No.	Equipment Description	Maximum Capacity
L40 Coating System	one self-fabricated 41" polyester film coating application system	20 gallons/hour
L41 Coating System	one self-fabricated 41" polyester film coating application system	20 gallons/hour
L42 Coating System	one self-fabricated 41" polyester film coating application system	20 gallons/hour
L43 Coating System	one self-fabricated 41" polyester film coating application system	20 gallons/hour
L44 Coating System	one self-fabricated 41" polyester film coating application system	20 gallons/hour
L45 Coating System	one self-fabricated 45" polyester film coating application system	20 gallons/hour
L46 Coating System	one self-fabricated 80" polyester film coating application system	30 gallons/hour
L47 Coating System	one self-fabricated 45" polyester film coating application system	20 gallons/hour

Film Line 40, including the following:

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
4001	Virgin Head Hopper Cyclone	11.3

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
4002	Virgin Head Hopper	11.3
4003	Reclaim Head Hopper Cyclone	11.3
4004	Reclaim Head Hopper	11.3
4011	Crystallizer Filter Receiver	2.0
4012	Main Dryer System	2.0
4021	L40 Casting Drum (no external vent)	2.0
4031	Stenter Oven - Neutral Zone	2.0
4032	Stenter Oven - Fume Exhaust	2.0
4033	Stenter Oven - Clip Cooling Exhaust	2.0
4034	Stenter 3rd Crystallizer	2.0
4035	Stenter Cooling Zone	2.0
		2.0

Film Line 41, including the following:

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
4101	Virgin Head Hopper Cyclone	11.3
4103	Reclaim Head Hopper Cyclone	11.3
4111	Main Dryer System	2.0
4121	L41 Casting Drum	2.0
4131	Stenter Oven - Neutral Zone	2.0
4132	Stenter Oven - Fume Exhaust	2.0

Film Line 42, including the following:

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
4201	Virgin Head Hopper Cyclone	11.3
4203	Reclaim Head Hopper Cyclone	11.3
4211	Main Dryer System - Rotary Type Chip Crystallization Dryer (*)	2.0
4221	L42 Casting Drum	2.0
4231	Stenter Oven - Neutral Zone	2.0

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
4232	Stenter Oven - Fume Exhaust	2.0
4271	L42 House Vacuum	2.0

Film Line 43, including the following:

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
4301	Virgin Head Hopper Cyclone	11.3
4303	Reclaim Head Hopper Cyclone	11.3
4305	Co-extrusion Head Hopper Feed Cyclone	11.3
4307	Coextrusion Chip Convey System	11.3
4311	Main Dryer System - Rotary Type Chip Crystallization Dryer (*)	2.5
4313	Co-extrusion Dryer System	2.5
4314	Main Extruder Vacuum Pump	2.5
4322	Casting Drum	2.5
4333	Stenter Oven - Neutral Zone	2.5
4332	Stenter Oven – 1 st Preheat	2.5
4331	Stenter Oven - Clip Cooling Zone	2.5
4334	Stenter Oven - Fume Exhaust	2.5
4335	Stenter Oven - Cooling Zone	2.5
4361	Direct Edge Trim Refeed	1.25
4372	L43 House Vacuum System	0.006

(*) - all other film line (L40, L43-L47) dryers are hopper type chip crystallization dryers

Film Line 44, including the following:

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
4403	Reclaim Head Hopper	11.3
4402	Virgin Head Hopper	11.3
4401	Virgin and Reclaim Head Hopper Feed Cyclone	11.3
4404	Co-extrusion Head Hopper Feed Cyclone	11.3
4412	Co-extrusion Chip Dryer	2.05
4411	Main Chip Dryer	2.05

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
4422	L44 Casting Drum (no external vent)	2.05
4432	Stenter Fume Exhaust	2.05
4433	Stenter Neutral Zone Exhaust	2.05
4434	Stenter Clip Cooling Exhaust	2.05
4435	Stenter 6 th Crystallizer Exhaust	2.05
4431	Stenter Preheat Make-up Exhaust	2.05
4441	Corona Treater	2.05
4471	L44, L46 House Vacuum System	0.014
4461	Edge Trim and Splits Cutter Dust Collector	1.025

Film Line 45, including the following:

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
4500	Virgin Head Hopper Feed Cyclone	11.3
4502	Reclaim Head Hopper Feed Cyclone	11.3
4506	Co-extrusion Head Hopper Feed Cyclone	11.3
4504	Master Batch Head Hopper Feed Cyclone	11.3
4511	Main Dryer System	2.5
4514	Main Extruder Vacuum Pump	2.5
4512	Co-extrusion Dryer System	2.5
4513	Master Batch Chip Dryer System	2.5
4522	L45 Casting Drum (no external vent)	2.5
4531	Stenter Oven - Fume and Neutral Zone	2.5
4532	Stenter Oven - Cooling Zone	2.5
4533	Stenter Oven - Clip Cooling Zone	2.5
4534	Stenter Oven - Preheat Oven 1	2.5
4561	L45 Cutters	1.25
4571	L40/L45 House Vacuum System	0.011

Film Line 46, including the following:

Reference No.	Equipment Description	Maximum Capacity (ton/hr)

Reference No.	Equipment Description	Maximum Capacity (ton/hr)
4601	Virgin and Reclaim Head Hopper Feed Cyclone	11.3
4611	L46 Main Dryer System	3.7
4406	L44/L46 Air Classifier	3.7
4621	L46 Casting Drum (no external vent)	3.7
4632	Stenter Oven - Fume and Neutral Zone	3.7
4633	Stenter Oven - Clip Cooling Zone	3.7
4634	Stenter Oven - Oven Exhaust	3.7
4631	Stenter Oven - Preheat Oven Exhaust	3.7
4661	F/D and Edge Trim Cutter	1.85
4662	Reclaim Cutter	1.85

Film Line 47, including the following:

Reference No.	Equipment Description	Maximum Capacity (ton/hr)
4701	Virgin Head Hopper Feed Cyclone	11.3
4703	Reclaim Head Hopper Feed Cyclone	11.3
4705	Master Batch Head Hopper Feed Cyclone	11.3
4711	Main Chip Dryer	3.7
4712	Main Extruder Vacuum	3.7
4721	L47 Casting Drum (no external vent)	3.7
4732	Stenter Oven - Neutral Zone Exhaust	3.7
4733	Stenter Oven - 1st Preheat Oven Exhaust	3.7
4734	Stenter Oven - Cooling Zone Exhaust	3.7
4735	Stenter Oven - Clip Cleaning Exhaust	3.7
4736	Stenter Oven - 4th Crystallizer & 1st Cooling Zone Exhaust	3.7
4737	Stenter Oven - Clip Cooling Exhaust	3.7
4738	Stenter Oven - Clip Debris Removal System	3.7
4761	L47 Cutters	1.85
4763	L47 House Vacuum System	0.009

Virgin Chip Bunkers, including the following:

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
2001	Virgin Chip Bunker #1	7.5
2002	Virgin Chip Bunker #2	7.5
2003	Virgin Chip Bunker #3	7.5
2004	Virgin Chip Bunker #4	7.5
2005	Virgin Chip Bunker #5	7.5
2006	Virgin Chip Bunker #6	7.5
2007	Virgin Chip Bunker #7	7.5
2008	Virgin Chip Bunker #8	7.5
2009	Virgin Chip Bunker #9	7.5
2010	Virgin Chip Bunker #10	7.5
2011	Virgin Chip Bunker #11	7.5
2012	Virgin Chip Bunker #12	7.5
2013	Virgin Chip Bunker #13	7.5
2014	Virgin Chip Bunker #14	7.5
2015	Virgin Chip Bunker #15	7.5
2016	Virgin Chip Bunker #16	7.5
2017	Virgin Chip Bunker #17	7.5
2018	Virgin Chip Bunker #18	7.5
2019	Virgin Chip Bunker #19	7.5
2020	Virgin Chip Bunker #20	7.5
2021	Virgin Chip Bunker #21	7.5
2022	Virgin Chip Bunker #22	7.5
2023	Virgin Chip Bunker #23	7.5
2024	Virgin Chip Bunker #24	7.5

Flake Recovery Operations, including the following:

- Primary Flake Bunkers:

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
6001	Primary Flake Bunker #1	4.5
6002	Primary Flake Bunker #2	4.5

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
6003	Primary Flake Bunker #3	4.5
6004	Primary Flake Bunker #4	4.5
6005	Primary Flake Bunker #5	4.5
6006	Primary Flake Bunker #6	4.5
6007	Primary Flake Bunker #7	4.5
6008	Primary Flake Bunker #8	4.5
6009	Primary Flake Bunker #9	4.5
6010	Primary Flake Bunker #10	4.5
6011	Primary Flake Bunker #11	4.5
6012	Primary Flake Bunker #12	4.5
6013	Primary Flake Bunker #13	4.5
6014	Primary Flake Bunker #14	4.5
6015	Primary Flake Bunker #15	4.5
6016	Primary Flake Bunker #16	4.5
6017	Primary Flake Bunker #17	4.5
6018	Primary Flake Bunker #18	4.5
6019	Primary Flake Bunker #19	4.5
6020	Primary Flake Bunker #20	4.5
6021	Primary Flake Bunker #21	1.25

- Intermediate Flake Bunkers:

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
6041	Intermediate Flake Bunker #1	1.75
6042	Intermediate Flake Bunker #2	1.75
6043	Intermediate Flake Bunker #3	1.75
6044	Intermediate Flake Bunker #4	1.75
6045	Intermediate Flake Bunker #5	1.75

- Flake Dryers:

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
6066a	Flake Dryer #1 (#1 and #4 share a common vent)	1.75

Reference No.	Equipment Description	Maximum Capacity (ton/hour)
6066b	Flake Dryer #4 (#1 and #4 share a common vent)	1.75
6067a	Flake Dryer #2 (#2 and #3 share a common vent)	1.75
6067b	Flake Dryer #3 (#2 and #3 share a common vent)	1.75
6070	Flake Dryer # 5	1.75

Railroad car chip unloading operations, including but not limited to the following:

- ‡ Two railroad car chip unloading stations (#2040 & #2041) rated at 7.5 tons/hr each.

LEGAL AND FACTUAL BASIS FOR APPLICABLE REQUIREMENTS:

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the Commonwealth of Virginia Federal Operating Permit Regulations for the purposes of Title V of the Federal Clean Air Act (9 VAC 5 Chapter 80 Article 1), and underlying applicable requirements in other state and federal rules. Applicable requirement means all of the following as they apply to emissions units in a Title V source:

- a. Any standard or other requirement provided for in the State Implementation Plan or the Federal Implementation Plan, including any source-specific provisions such as consent agreements or orders.
- b. Any term or condition of any pre-construction permit issued pursuant to 9 VAC 5-80-10, Article 8 (9 VAC 5-80-1700 et seq.) of this part or 9 VAC 5-80-30 or of any operating permit issued pursuant to 9 VAC 5 Chapter 80 Article 5, except for terms or conditions derived from applicable state requirements or from any requirement of these regulations not included in the definition of applicable requirement.
- c. Any standard or other requirement prescribed under these regulations, particularly the provisions of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), 9 VAC 5-50 (9 VAC 5-50-10 et seq.) or 9 VAC 5-60 (9 VAC 5-60-10 et seq.), adopted pursuant to requirements of the federal Clean Air Act or under _ 111, 112 or 129 of the federal Clean Air Act.
- d. Any requirement concerning accident prevention under §112(r)(7) of the federal Clean Air Act.
- e. Any compliance monitoring requirements established pursuant to either §504(b) or §114(a)(3) of the federal Clean Air Act or these regulations.
- f. Any standard or other requirement for consumer and commercial products under § 183(e) of the federal Clean Air Act.
- g. Any standard or other requirement for tank vessels under §183(f) of the federal Clean Air Act.
- h. Any standard or other requirement in 40 CFR, Part 55 to control air pollution from outer continental shelf sources.
- i. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has determined that such requirements need not be contained in a permit issued under this article.

- j. With regard to temporary sources subject to 9 VAC 5-80-130, (i) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in Article 8 (9 VAC 5-80-1700 et seq.) of this part.
- k. Any standard or other requirement of the acid deposition control program under Title IV of the Clean Air Act or the regulations promulgated thereunder.
- l. Any standard or other requirement governing solid waste incineration under §129 of the Clean Air Act. Each state and federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 9 VAC 5-80 Article 1 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the state, but is not federally-enforceable is identified in the draft Title V permit as such.

EMISSION UNIT APPLICABLE REQUIREMENTS:

The source has emission unit specific applicable requirements for the polymer manufacturing plant, the film production lines and the boilers and process heaters. The sources of applicable requirements for the various areas are as follows:

Polymer Plant – The 12/30/2003 NSR permit; the May 30, 1996 RACT Agreement; the November 30, 1999 Consent Order; Chapter 40 Existing Source Standard for Storage Tanks from Virginia's regulations (Rule 4-25); and 40 CFR 63 Subparts A and JJJ (MACT standard for Group IV Polymers (PET) Manufacturing).

Film Production Lines – The 12/30/2003 NSR permit and 40 CFR 63 Subparts A and JJJJ (MACT standard for Paper and Other Web Coating)

Boilers and Process Heaters and Incinerator – The 2/25/1988 NSR permit and the new and modified source visible emission standard from Chapter 50 of the Virginia regulations, 9 VAC 5-50-80, apply to boiler #1003. The Chapter 40 Existing Source Standards for Fuel Burning Equipment (Rule 4-8) and Visible Emissions (Rule 4-1) from Virginia's regulations apply to Boilers #1001 and #1002 and the two Dowtherm heaters. The Chapter 40 Existing Source Standards for Incinerators (Rule 4-7) and Visible Emissions (Rule 4-1) from Virginia's regulations apply to the Incinerator. 40 CFR 63 Subparts A and DDDDD (Industrial Boiler MACT) apply to the three boilers and the two dowtherm units.

In addition, certain requirements that from the 12/30/2003 NSR permit and the November 30, 1999 Consent Order that apply on a plant-wide basis were included in a separate "Facility-Wide Requirements" section. Since they do not apply to a specific operational division of the facility, the requirements of 40 CFR 63 Subparts A and EEEE (Organic Liquids Distribution MACT) were included in the Facility-Wide section as well.

A. Fuel Burning Equipment Applicable Requirements – the source of the requirement appears in parentheses after the requirement (along with the Title V regulatory reference)

- ▶ The 2/25/1988 NSR permit conditions 4-9 are included in the Title V permit. These conditions limit the operation of boiler #1003. The other conditions of the 2/25/1998 NSR permit are either obsolete, environmentally insignificant, or inapplicable for the Title V program.
- 1. The annual fuel usage shall not exceed 402.6 x 10⁶ cubic feet of natural gas or 2.85 x 10⁶ gallons of No. 2 fuel oil.
(9 VAC 5-80-110 and Condition 4 of the NSR permit dated 2/25/1988)
- 2. Particulate emissions from the boiler shall not exceed 0.7 or 0.14 pounds per hour when using No. 2 oil

or natural gas, respectively, or 2.85 tons per year total.

(9 VAC 5-80-110 and Condition 5 of the NSR permit dated 2/25/1988)

3. Sulfur dioxide emissions from the boiler shall not exceed 9.5 or 0.03 pounds per hour when using No. 2 oil or natural gas, respectively, or 40.47 tons per year total.
(9 VAC 5-80-110 and Condition 6 of the NSR permit dated 2/25/1988)
4. Nitrogen oxide emissions from the boiler shall not exceed 6.8 or 6.5 pounds per hour when using No. 2 oil or natural gas, respectively, or 28.5 tons per year total.
(9 VAC 5-80-110 and Condition 7 of the NSR permit dated 2/25/1988)
5. The approved fuels for the boiler are natural gas and No. 2 oil. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 8 of the NSR permit dated 2/25/1988)
6. The average sulfur content of the No. 2 oil to be burned in the boiler shall not exceed 0.20 percent by weight, per shipment. DuPont Teijin Films shall maintain records of all shipments purchased, indicating sulfur content per shipment. These records shall be available for inspection by the Board. They will be kept on file for a period of at least five (5) years.
(9 VAC 5-80-110 and Condition 9 of the NSR permit dated 2/25/1988)
7. Visible emissions from boiler #3 shall not exceed 20 percent opacity, except for one six-minute period in any one hour of not more than 30% opacity. Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section. This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-50-80, 9 VAC 5-80-110 and 9 VAC 5-50-20 A4)
8. Visible emissions from the incinerator, boilers #1001 and #1002 and Dowtherm heaters #1004 and #1005 shall not exceed 20 percent opacity, except for one six-minute period in any one hour of not more than 60% opacity. Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section. This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-40-940, 9 VAC 5-80-110 and 9 VAC 5-40-20 A4)
9. Emissions from the operation of boilers #1001 and #1002 and Dowtherm heaters #1004 and #1005 shall not exceed the limits specified below:

Particulate Matter	0.307 pounds per million BTU
Sulfur Dioxide	2.64 pounds per million BTU

(9 VAC 5-80-110 and 9 VAC 5, Chapter 40, Article 8)
10. Emissions from the operation of the incinerator (ref. #1006) shall not exceed the limits specified below:

Particulate Matter	0.14 grains/dscf @ 12%CO ₂
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(9 VAC 5-80-110 and 9 VAC 5, Chapter 40, Article 7)

B. Fuel Burning Equipment Periodic Monitoring – the source of the requirement appears in parentheses after the requirement (along with the Title V regulatory reference)

General Periodic Monitoring Notes:

The EPA periodic monitoring guidance, dated September 18, 1998, indicates on page 4 that periodic monitoring is required for each emission point at a source, subject to Title V of the Act, that is subject to an applicable requirement.

EPA has also stated that MACT (40 CFR 63) and NSPS (40 CFR 60) standards promulgated in the 1990s by default can be considered to include monitoring, recordkeeping, and reporting provisions sufficient to qualify as periodic monitoring without additional requirements. Thus no additional periodic monitoring is discussion is included for 40 CFR 63 Subparts A and JJJ (Polymer Plant), 40 CFR 63 Subpart JJJJ (Film Line Operations), 40 CFR 63 Subpart EEEE (Facility-Wide Requirements) and 40 CFR 63 Subpart DDDDD (Boilers and process heaters).

In addition, the other main sources of applicable requirements for the facility (the 2003 new source review permit, the 1996 RACT agreement and the 1999 Consent Order) have all been created since the CAAA in the 1990s. Review of these documents revealed that, in most cases, they included monitoring, recordkeeping, and reporting provisions sufficient to qualify as periodic monitoring without additional requirements. For example, the 2003 new source review permit included extensive material throughput limitations and associated recordkeeping provisions. Even the 1988 new source review permit contained “modern” enforcement mechanisms such as fuel type and throughput limitations, oil sulfur analyses and associated recordkeeping.

Exceptions to this were the opacity standard from the 2003 permit and certain requirements from the 1996 RACT agreement (non-contact condensers required by Condition E.3) and the 1999 consent order (223.3 tons/yr VOC limit from Condition D.4 and VOC scrubber control from Condition D.6). Also, the existing source Rules from Chapter 40 of Virginia’s regulations (Rules 4-1, 4-7, 4-8 and 4-24) do not contain any specific or enforceable monitoring requirements, so periodic monitoring was applied to these standards in the Title V permit.

Since there was no real monitoring provisions for the opacity requirement (Condition #10 of the 2003 NSR permit and Condition #22 of the draft TV permit) in the 2003 permit, an opacity observation schedule along with associated recordkeeping and reporting provisions were added. A similar protocol was used as periodic monitoring for the equipment subject to the new/modified source opacity standard of 9 VAC 5-50-80 (boiler #1003) and the existing source opacity standard of 9 VAC 5-40-80 (boilers #1001-1002, dowtherm heaters #1004-1005 and the incinerator).

A monitoring protocol (including stacktesting, operating parameter monitoring and associated recordkeeping) was developed and included in the Title V permit for the Chapter 40 Incinerator requirements (Rule 4-7). A monitoring protocol (only recordkeeping was required since the subject fuel burning equipment burn only natural gas and distillate oil) was developed and included in the Title V permit for the Chapter 40 fuel burning equipment requirements (Rule 4-8). A monitoring protocol (throughputs, emission calculations and associated recordkeeping) was developed and included in the Title V permit for the Condition D.4 of the 1999 Consent Order. A monitoring protocol (annual inspections and associated recordkeeping) was developed and included in the Title V permit for the Condition E.3 of the 1996 RACT agreement and Condition D.6 of the 1999 Consent Order. Similarly, a monitoring protocol (certification of submerged fill pipe/bottom fill) was developed and included in the Title V permit for the Chapter 40 storage tank requirements (Rule 4-24).

For all actual monitoring (i.e. opacity checks, monthly/annual inspections, etc.), records shall be kept to verify the occurrence and results of the monitoring. In addition, the source shall submit to the DEQ reports of any opacity observations which reveal visible emissions in excess of an applicable standard.

The applicable periodic monitoring for the fuel burning equipment is defined as follows (the source of the monitoring appears in parentheses after the requirement along with a Title V periodic monitoring regulatory reference)(also, the condition/requirement numbers may not always match those of the Title V permit itself):

11. Each incinerator, boiler and heater shall be observed visually at least once each operating month for at least a brief time period to determine which emissions units have any visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the emissions unit. Each emissions unit observed having any visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.
(9 VAC 5-80-110)
12. If the incinerator is operated at any time within the term of this permit, the permittee shall develop and submit, to the Director, Piedmont Region, for approval an operation plan for the incinerator. The operation plan shall specify the incinerator operating parameters that will be monitored by the permittee in order to ensure compliance with the emission limitation contained in Condition #10. The plan shall also specify monitoring frequencies and methods, appropriate operating parameter ranges and recordkeeping and deviation reporting procedures for the selected operating parameters. The plan shall be submitted for approval no later than 30 days before the incinerator begins operation.
(9 VAC 5-80-110)
13. If the incinerator is operated at any time within the term of this permit, the permittee shall conduct performance tests on the incinerator for particulate matter to determine compliance with the emission limit contained in Condition #10 and to verify the operating parameter ranges specified in Condition #12. The tests shall be performed, and demonstrate compliance, no later than 90 days after the incinerator begins operation. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 of State Regulations, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. Four copies of the test results shall be submitted to the Director, Piedmont Region within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110)
14. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:
 - a. The monthly and annual consumption of natural gas and distillate oil by each boiler and heater. Annual consumption shall be calculated monthly as the sum of each consecutive 12-month period.
 - b. Records necessary to demonstrate compliance with Condition #9.
 - c. The fuel shipment records required by Condition #6.
 - d. If the incinerator is operated at any time within the term of this permit, the records specified by the operating plan required by Condition #12
 - e. The results of the monthly visible emission observations required by Condition #11 and

details of any corrective action taken as a result of these inspections.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110)

15. The permittee shall report the results of any 40 CFR Part 60 Appendix A Method 9 opacity test performed as a result of Condition #11 above. If the test indicates the facility is out of compliance with a standard contained in either Conditions #7 or #8, the source shall also report the length of time associated with any exceedance of a standard and the corrective actions taken to correct the exceedance. This report shall be sent to the Director, Piedmont Regional Office within seven days of the applicable test unless otherwise noted in Section IX, Condition E.
(9 VAC 5-80-110)

C. 40 CFR 63 Subpart DDDDD – Limitations and Monitoring – the source of the requirement appears in parentheses after the requirement (along with the Title V regulatory reference)

16. Unless other wise specified in 40 CFR 63 Subparts A and DDDDD, upon September 13, 2007, boilers #1001-1003 and Dowtherm Heaters #1004-1005 shall be in compliance with all applicable provisions of 40 CFR 63, Subparts A and DDDDD.
(40 CFR 63 Subparts A and DDDDD and 9 VAC 5-80-110)

D. Film Line Operations Applicable Requirements – the source of the requirement appears in parentheses after the requirement (along with the Title V regulatory reference)

17. Particulate matter emissions from the equipment listed below shall be controlled as described in the following table, or equivalent:

Vent No.	Equipment Description	Pollutant	Control Equipment	Model
4012	L40 Drier Fines Filter Receiver	TSP/PM10	Baghouse	Flex Kleen
4011	L40 Crystallizer Chip Filter Receiver	TSP/PM10	Baghouse	Young Industries #8813
4307	L43 Chip Convey System	TSP/PM10	Baghouse	Flex-Kleen 56 CTBS8 III
4361	L43 Edge Trim Refeed Cutter	TSP/PM10	Baghouse	Flex-Kleen 84-CT-18
4313	L43 Coextrusion Dryer	TSP/PM10	Baghouse	Flex-Kleen 28BVBC-9 III
4372	L43 Vacuum House System	TSP/PM10	Baghouse	Hoffman
4406	L44/L46 Air Classifier	TSP/PM10	Baghouse	Flex-Kleen 100WSBC-100
4412	L44 Coextrusion Dryer	TSP/PM10	Baghouse	Flex-Kleen 58CTBC8 III
4411	L44 Main Dryer System	TSP/PM10	Baghouse	Flex-Kleen 58CTBC14 III
4471	L44/L46 House Vacuum System	TSP/PM10	Baghouse	Hoffman #36 x 144

Vent No.	Equipment Description	Pollutant	Control Equipment	Model
				VAC Separator
4461	L44 Cutter	TSP/PM10	Baghouse	Flex-Kleen #100-WRC-144-III-G
4511	L45 Main Dryer System	TSP/PM10	Baghouse	Flex-Kleen 58 CTBG 14 III
4512	L45 Co-extrusion Dryer System	TSP/PM10	Baghouse	Flex-Kleen BVBS-9
4513	L45 Master Batch Dryer System	TSP/PM10	Baghouse	Young Ind. VC60-4-32
4561	L45 Cutters	TSP/PM10	Baghouse	Flex-Kleen 84 WRC 64
4571	L45 House Vacuum	TSP/PM10	Baghouse	Hoffman 36 x 144
4611	L46 Dryer System	TSP/PM10	Baghouse	Flex-Kleen No. 58CT-14
4661	L46 F/D and Edge Trim Cutter	TSP/PM10	Baghouse	Flex-Kleen No. 100 MRC-144
4662	L46 Reclaim Cutter	TSP/PM10	Baghouse	Flex-Kleen No. 84 WRBC-48
4711	L47 Dryer System	TSP/PM10	Baghouse	Flex-Kleen 58-CT-14
4761	L47 Cutters	TSP/PM10	Baghouse	Ultra C-65-84
4763	L47 House Vacuum	TSP/PM10	Baghouse	Hoffman 36 x 96
6001-6021	Primary Flake Bunkers #1-#21 (21 total bunkers - Bunkers 1-4 are all controlled by a common baghouse, #19)	TSP/PM10	18 baghouses for the 21 bunkers	Flex-Kleen #100-CT-64-II-G
2040	Railroad Car Chip Unloading Station (two baghouses operated in parallel but not at the same time)	TSP/PM10	Baghouse	Ultra Industries #CB-24-84-ARR III & Flex-Kleen 84CTBC -24 Arg 3
2041	Railroad Car Chip Unloading Station	TSP/PM10	Baghouse	Ultra Industries #CB-24-84-ARR III
6066-6070	Flake Dryers	TSP/PM10	Three baghouses for the 5 dryers	Flex-Kleen 84-BVBS-16-III
6041-6045	Intermediate Flake Bunkers	TSP/PM10	One baghouse per bunker	Ultra Industries CB34-100 ARG II-G

(9 VAC 5-80-110 and Condition 3 of the NSR permit dated 12/30/2003)

18. Volatile Organic Compound (VOC) emissions from the film coating operations (L40-L47) shall be

controlled by using coatings with VOC content no greater than 1.0 pound VOC per gallon coating, as applied, on a monthly average basis.
(9 VAC 5-80-110 and Condition 4 of the NSR permit dated 12/30/2003)

19. The yearly throughput of chip, flake, film, or batches for the following operations shall not exceed the specified amounts, calculated as the sum of each consecutive 12 month period:

Film Line 40	- 15,330 tons/yr
Film Line 43	- 17,520 tons/yr
Film Line 44	- 18,000 tons/yr
Film Line 45	- 21,900 tons/yr
Film Line 46	- 32,412 tons/yr
Film Line 47	- 32,412 tons/yr
Virgin Chip Bunkers	- 90,000 tons/yr
Primary Flake Bunkers (#1-21)	- 75,000 tons/yr

<u>Total Railroad Car Chip Unloading Operations (#2040 #2041)</u>	- 41,500 tons/yr
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<u>Total Flake Dryers (#6066-6070)</u>	- 75,000 tons/yr
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<u>Total Intermediate Flake Bunkers (#6041-6045)</u>	- 75,000 tons/yr
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Regardless of the throughput limits listed above, the yearly throughput of chip, flake, or film for the following individual emission units shall not exceed the specified amounts, calculated as the sum of each consecutive 12 month period.

Ref. #4361	- L43 Edge Trim Refeed Cutter	- 8,760 tons/yr
Ref. #4372	- L43 House Vacuum System	- 44 tons/yr
Ref. #4307	- L43 Coextrusion Chip Convey System	- 8,760 tons/yr
Ref. #4471	- L44/L46 House Vacuum System	- 126 tons/yr
Ref. #4461	- L44 Cutter	- 9,000 tons/yr
Ref. #4561	- L45 Cutters	- 10,950 tons/yr
Ref. #4571	- L40/L45 House Vacuum System	- 94 tons/yr
Ref. #4661	- L46 F/D and Edge Trim Cutter	- 16,206 tons/yr
Ref. #4662	- L46 Reclaim Cutter	- 16,206 tons/yr
Ref. #4761	- L47 Cutters	- 16,206 tons/yr
Ref. #4763	- L47 House Vacuum	- 81 tons/yr

Note: Compliance with the throughput limits specified above for House Vacuum Systems #4372, #4471, #4571 and #4763 shall be determined based upon 0.25% of the vacuum systems respective Film Line throughputs.
(9 VAC 5-80-110 and Condition 6 of the NSR permit dated 12/30/2003)

20. The yearly throughput of VOCs for all Film Line Coating Operations (L40-L47) shall not exceed 16.3 tons, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 7 of the NSR permit dated 12/30/2003)

21. Emissions from the operation of the following equipment/operations shall not exceed the limits specified below:

	TSP lbs/hr - tons/yr	PM10 lbs/hr - tons/yr	VOC lbs/hr - tons/yr
Film Line 40	1.3 - 1.1	1.3 - 1.1	1.6 - 6.3
Film Line 43	3.3 - 5.7	3.3 - 5.7	4.2 - 9.5
Film Line 44	1.3 - 1.0	1.3 - 1.0	2.5 - 7.3
Film Line 45	2.6 - 1.7	2.6 - 1.7	4.6 - 11.5
Film Line 46	0.8 - 1.7	0.8 - 1.7	3.0 - 13.2
Film Line 47	1.9 - 1.7	1.9 - 1.7	3.9 - 17.0
Primary Flake Bunkers	9.2 - 3.8	9.2 - 3.8	
Film Line Coating Operations (Total for L40-L47)			170.0 - 16.3
Flake Dryers (Total for #6066-6070)	0.9 - 3.8	0.9 - 3.8	
Intermediate Flake Bunkers (Total for #6041-6045) (9 VAC 5-80-10 H and Condition 8 of the NSR permit dated 12/30/2003)	0.9 - 3.8	0.9 - 3.8	

22. Visible emissions from each fabric filter listed in Condition #17 shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Visible emissions from all other film line emission points included in the significant emission unit table (Section II of this permit) shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction. (9 VAC 5-80-110 and Condition 10 of the NSR permit dated 12/30/2003)

E. Film Line Operations Periodic Monitoring – the source of the requirement appears in parentheses after the requirement (along with the Title V regulatory reference)

23. Each baghouse listed in Condition #17 shall be equipped with a device to continuously measure the differential pressure drop across the baghouse. The devices shall be installed in accessible locations and shall be maintained by the permittee such that they are in proper working order at all times.
(9 VAC 5-80-110 and Condition 3 of the NSR permit dated 12/30/2003)
24. Each unit subject to Condition #22, except for Primary Flake Bunkers #1-#21, shall be observed visually at least once each operating month for at least a brief time period to determine which emissions units have any visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the emissions unit. Each emissions unit observed having any visible emissions shall be followed up

with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.

(9 VAC 5-80-110)

25. Each Primary Flake Bunker (#1-#21) which operates for more than 24 consecutive hours in a month shall be observed visually at least once each month for at least a brief time period to determine whether the Primary Flake Bunker has any visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the Primary Flake Bunker. Each Primary Flake Bunker observed having any visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.
(9 VAC 5-80-110)
26. For each visible emission observation of a baghouse or fabric filter listed in Condition #17 as required by Conditions #24 or #25, the permittee shall also measure and record the differential pressure drop across the baghouse or fabric filter.
(9 VAC 5-80-110)
27. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:
 - a. The yearly throughput of chip, flake, or film (as appropriate) for each process line and piece of equipment listed in Condition #19, calculated as the sum of each consecutive 12 month period, as well as any other information required to demonstrate compliance with the emission limits contained in condition #21.
 - b. The combined (for all coating lines) yearly throughput of coating operation VOCs, calculated as the sum of each consecutive 12 month period, as well as any other information required to demonstrate compliance with the emission limits contained in condition #21.
 - c. For each month where a coating formulation is applied in the film coating operation which exceeds the VOC content specified in Condition #18, the VOC content (lbs/gal), as applied, of each coating formulation used in the film coating operation shall be recorded for the month. If none of the coatings used in the month contain greater than 1.0 lbs VOC/gal, maintain a record of the VOC content, as applied, of all coating formulations.
 - d. For each month where a coating formulation is applied in the film coating operation which exceeds the VOC content specified in Condition #18, the amount (gallons) of each coating formulation applied in the film coating operation that month and the volume weighted average VOC content (lbs/gal), as applied, of the coating formulations used in the film coating operation for that month.
 - e. The results of the monthly visible emission observations and differential pressure readings required by Conditions #24-26 and details of any corrective action taken as a result of these inspections.

The records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 11 of the NSR permit dated 12/30/2003)

28. The permittee shall report the results of any 40 CFR Part 60 method 9 opacity test performed as a result of Conditions #24 or #25. If the test indicates the facility is out of compliance with a standard contained in Condition #22, the source shall also report the length of time associated with any exceedance of a standard and the corrective actions taken to correct the exceedance. This report shall be sent to the Director, Piedmont Regional Office within seven days of the applicable test unless otherwise noted in Section IX, Condition E.

F. 40 CFR 63 Subpart JJJJ – Limitations and Monitoring – the source of the requirement appears in parentheses after the requirement (along with the Title V regulatory reference)

27. Unless other wise specified in 40 CFR 63 Subparts A and JJJJ, upon December 5, 2005, the film line coating operations shall be in compliance with all applicable provisions of 40 CFR 63, Subparts A and JJJJ.
(40 CFR 63 Subparts A and JJJJ and 9 VAC 5-80-110)

G. Polymer Plant Applicable Requirements – the source of the requirement appears in parentheses after the requirement (along with the Title V regulatory reference)

30. The yearly production (in batches) for the following operations shall not exceed the specified amounts, calculated as the sum of each consecutive 12 month period:

<u>Total Crude Glycol Tanks</u>	- 17,000 total batches/yr
(#0126-0128)	- 15,000 DMT batches/yr

<u>L1 Polymer Reactor/Demister System (#0101)</u>	- 4,040 DMT batches/yr
	- (X1) TA batches/yr, where

(X1) = $35,374 - 8.755 * (DMT1)$, where (DMT1) is the number of DMT1 batches produced by L1 in any consecutive 12 month period.

<u>L2 Polymer Reactor/Demister System (#0102)</u>	- 4,040 DMT batches/yr
	- (X2) TA batches/yr, where

(X2) = $35,374 - 8.755 * (DMT2)$, where (DMT2) is the number of DMT batches produced by L2 in any consecutive 12 month period.

<u>L3 Polymer Reactor/Demister System (#0103)</u>	- 4,040 DMT batches/yr
	- (X3) TA batches/yr, where

(X3) = $35,374 - 8.755 * (DMT3)$, where (DMT3) is the number of DMT batches produced by L3 in any consecutive 12 month period.

<u>L4 Polymer Reactor/Demister System (#0104)</u>	- 4,040 DMT batches/yr
	- (X4) TA batches/yr, where

(X4) = $35,374 - 8.755 * (DMT4)$, where (DMT4) is the number of DMT batches produced by L4 in any consecutive 12 month period.

(9 VAC 5-80-110, Condition D.3 of 11/30/99 Consent Order and Condition 6 of the NSR permit dated 12/30/2003)

31. VOC emissions from the operation of the following equipment/operations shall not exceed the limits specified below:

lbs/hr tons/yr

- | | | |
|--|-----|------|
| Crude Glycol Tanks
(Total for #0126-0128) | 3.3 | 7.1 |
| L1 Polymer Reactor System (#0101) | 3.2 | 13.0 |
| L2 Polymer Reactor System (#0102) | 3.2 | 13.0 |
| L3 Polymer Reactor System (#0103) | 3.2 | 13.0 |
| L4 Polymer Reactor System (#0104)
(9 VAC 5-80-110 and Condition 8 of the NSR permit dated 12/30/2003) | 3.2 | 13.0 |
32. The two methanol storage tanks shall be equipped with a control method that will remove, destroy or prevent the discharge into the atmosphere of at least 60% by weight of VOC emissions during the filling of such tank. The use of a submerged fill pipe or bottom filling shall be considered acceptable achievement of this standard.
(9 VAC 5-80-110, 9 VAC 5-40-3430 B and 9 VAC 5-40-3440 B)
33. VOC emissions from the Ethylene Glycol stills vacuum system shall be controlled by the use of non-contact condensers on the Ethylene Glycol stills vacuum system and by diverting the resulting condensate away from the hotwell/cooling tower system.
(9 VAC 5-80-110 and Condition E.3 of the 5/30/1996 RACT Agreement)
34. VOC emissions from the two methanol storage tanks and the methanol receiver tank shall be controlled in accordance with 40 CFR 63, Subpart JJJ. The methanol tanks and wet scrubber shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition D.4 of the 11/30/1999 Consent Order)
35. Fugitive VOC emission from the polymer plant shall be controlled by a Leak Detection and Repair (LDAR) Program in accordance with 40 CFR 60, Subpart VV as if the polymer plant was considered an “affected facility” under 40 CFR 60.480 and as if all raw materials, intermediate and final products used/produced at the facility were listed in 40 CFR 60.489. The permittee shall comply with all applicable procedures and standards and all test, recordkeeping and reporting requirements of 40 CFR 60, Subpart VV. The required reports of 40 CFR 60.487 shall not be submitted to the Administrator, but instead, shall be kept at the site for the most recent 5 year period and shall be available for inspection during normal working hours.
(9 VAC 5-80-110 and Condition E.2 of the 5/30/1996 RACT Agreement)
36. Fugitive Hazardous Air Pollutant (HAP) emissions from the polymer plant shall be controlled by a Leak Detection and Repair (LDAR) Program in accordance with 40 CFR 63.1331. Where the LDAR requirements of this condition differ from those of Condition #35, the more stringent requirement shall apply.
(9 VAC 5-80-110 and 40 CFR 63.1331)
37. The permittee shall comply with the requirements of 40 CFR 63 Subpart JJJ through the use of an Emission Average as provided in 40 CFR 63.1332. Unless otherwise noted in this permit, the permittee shall operate the polymer plant as outlined in the 10/1997 Emission Averaging Plan as amended by the 11/15/2002 Notice of Compliance Status report and subsequent periodic reports. The following emission units are currently included in the Emissions Average:

<u>Reference</u> <u>#</u>	<u>Description</u>	<u>Group 1 or 2</u> <u>Status</u>	<u>Emission Unit</u> <u>Category</u>	<u>Credit/Debit</u> <u>Source</u>
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0101	Polymer Reactor System L1	2	Batch Process Vent	Credit
0102	Polymer Reactor System L2	2	Batch Process Vent	Credit
0103	Polymer Reactor System L3	2	Batch Process Vent	Credit
0104	Polymer Reactor System L4	2	Batch Process Vent	Credit
0121	Methanol Receiver	1	Storage Vessel	Debit
0122	Methanol Storage Tank	1	Storage Vessel	Debit
0123	Methanol Storage Tank	1	Storage Vessel	Debit
0139	Effluent Tank	1	Wastewater Steam	Debit
0127	Incinerator Tank	1	Wastewater Steam	Debit
1028	Effluent Pit	1	Wastewater Steam	Debit
1029	Collection Sump	1	Wastewater Steam	Debit
1061	Equalization Basin	1	Wastewater Steam	Debit
N/A	Debit Generating Activities associated with off-site transfers of wastewater	1	Wastewater Stream	Debit

For all emission points included in the emissions average, the permittee shall perform the following tasks:

- a. Calculate and record monthly debits for all Group 1 emission points that are controlled to a level less stringent than the reference control technology or standard for those emission points. The equations in 40 CFR 63.1332(g) shall be used to calculate debits.
 - b. Calculate and record monthly credits for all Group 1 and Group 2 emission points that are over-controlled to compensate for the debits. The equations in 40 CFR 63.1332(h) shall be used to calculate credits.
 - c. Demonstrate that annual credits calculated according to 40 CFR 63.1332(h) are greater than or equal to debits calculated for the same annual compliance period according to 40 CFR 63.1332(g).
 - d. Demonstrate that debits calculated for a quarterly (3-month) period according to 40 CFR 63.1332(g) are not more than 1.30 times the credits for the same period calculated according to 40 CFR 63.1332(h). Compliance for the quarter shall be determined based on the ratio of credits and debits from that quarter, with 30 percent more debits than credits allowed on a quarterly basis.
 - e. Record and report quarterly and annual credits and debits in the Periodic Reports as specified in §63.1335(e)(6). Every fourth Periodic Report shall include a certification of compliance with the emissions averaging provisions as required by §63.1335(e)(6)(xi)(C)(2).
 - f. The permittee shall demonstrate that the emissions from the emission points included in the emissions average will not result in greater hazard or risk to human health or the environment than if the emission points were controlled according to the provisions in §§63.1314, 63.1315, 63.1316 through 63.1320, 63.1321, and 63.1330.
 - g. Demonstrate compliance with the requirements of 63.1332(m).
(9 VAC 5-80-110 and 40 CFR 63.1332)
38. Hazardous Air Pollutant (HAP) containing wastewater streams that are discharged to the effluent pit, collection sump and equalization basin shall be controlled by using the on-site bio-treatment plant (or equivalent off-site treatment). The bio-treatment plant (or off-site Treatment) shall control

the HAP emissions by removing sufficient HAP from the wastewater to meet the requirements of 40 CFR 63.138.
(9 VAC 5-80-110, 40 CFR 63.1330 and 40 CFR 63.138)

39. The permittee shall develop and implement a written start-up, shutdown and malfunction (SSM) plan as specified in 40 CFR 63.6(e)(3). This plan shall describe, in detail, procedures for operating and maintaining the polymer plant during periods of SSM and a program for corrective action for malfunctioning process and air pollution control equipment used to comply with 40 CFR 63, Subpart JJJ.
(9 VAC 5-80-110 and 40 CFR 63.1335(b)(1))
40. Except where this permit is more restrictive than the applicable requirement, the polymer plant shall be operated in compliance with all requirements of 40 CFR 63 Subparts A and JJJ.
(9 VAC 5-80-110 and 40 CFR 63 Subparts A and JJJ)

H. Polymer Plant Periodic Monitoring – the source of the requirement appears in parentheses after the requirement (along with the Title V regulatory reference)

41. The permittee shall monitor each heat exchange system subject to 40 CFR 63.1328, including the eight heat exchanger systems (one for each EI reactor and autoclave) on Polymer Reactor systems L1-L4, the two heat exchange systems (with one common sampling point) on each of the two glycol distillation columns and the bulk cooling waters supply leaving the main cooling tower (#1051), for leaks on a quarterly basis in accordance with 40 CFR 63.104(b). Whenever a leak is detected, the permittee shall repair the leak in accordance with the requirements of 40 CFR 63.104(d).
(9 VAC 5-80-110 and 40 CFR 63.1328)
42. The permittee shall install, operate and maintain continuous monitoring devices for the following three operating parameters:
 - a. Scrubber water temperature.
 - b. Scrubber water recirculation flow rate.
 - c. Scrubber water makeup flow rate.

In addition, the permittee shall conduct monitoring for the following indicator parameter for the wet scrubber:

- d. Scrubber blowdown Total Organic Compounds (TOC) concentration. This parameter shall be monitored on a monthly basis as a 24-hour composite and shall be used to assess the performance of the scrubber HAPs removal efficiencies within the emissions averaging calculations.

Alternatively, the permittee shall install, operate and maintain continuous monitoring devices for any parameters designated in an United States Environmental Protection Agency approved site-specific monitoring plan.
(9 VAC 5-80-110 and 40 CFR 63.1334)

43. The permittee shall operate the wet scrubber in a manner consistent with the minimum or maximum (as appropriate) operating parameter values as specified below:

Parameter	Operating Value (24-hr average)
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Scrubber water temperature	77 degrees F - maximum
Scrubber water recirculation flow rate	16 gallons/minute - minimum
Scrubber water makeup flow rate	6 gallons/minute – minimum

The permittee shall continuously monitor and record the values of these operating parameters during all periods of scrubber operation.

(9 VAC 5-80-110 and 40 CFR 63.1334)

44. The permittee shall secure the scrubber bypass line damper or valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A monthly visual inspection of the seal or closure mechanism shall be performed to ensure that the damper or valve is maintained in the non-diverting position and emissions are not diverted through the bypass line.
(9 VAC 5-80-110 and 40 CFR 63.1324(e))

45. The permittee shall monitor the following parameters for both aeration basins of the bio-treatment plant during all periods of operation:

- a. Mixed Liquor Suspended Solids – three (3) samples/measurements per week
- b. Dissolved Oxygen – four (4) samples/measurements per week
- c. Aeration Basin pH – four (4) samples/measurements per week

(9 VAC 5-80-110 and 40 CFR 63.1330 and 40 CFR 63.143(c))

46. The permittee shall operate both aeration basins of the bio-treatment plant in a manner consistent with the operating parameter values specified below during all periods of operation:

<u>Parameter</u>	<u>Operating Value</u>
Mixed Liquor Suspended Solids	greater than 3000 mg/l
Dissolved Oxygen	greater than or equal to 0.5 mg/l
Aeration Basin pH	between 6 and 8 s.u.

The permittee shall monitor and record the values of these parameters for each operating aeration basin.

(9 VAC 5-80-110, 40 CFR 63.1330, 40 CFR 63.1334(d) and 40 CFR 63.143(f))

47. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:
- a. The yearly production (in batches) for each polymer line, calculated as the sum of each consecutive 12 month period, as well as any other information required to demonstrate compliance with the emission limits contained in Condition #31.
 - b. Certification of submerged fill pipe (or bottom filling design) for each storage tank subject to Condition #32.
 - c. Records of annual inspections demonstrating compliance with the requirements of

Conditions #33 and #34.

- d. LDAR records required by 40 CFR 60, Subpart VV and Condition #35.
- e. LDAR records required by 40 CFR 63.1331 and Condition #36.
- f. SSM records required by 40 CFR 63.1335(b)(1)(I), if applicable.
- g. Records of the monitoring data required by Condition #43 as required by 40 CFR 63.1335(d).
- h. Records of any heat exchanger leaks and associated corrective action as required by 40 CFR 63.104(f).
- i. Records of all information required to calculate Emission Average credits and debits.
- j. For each Group 1 or Group 2 storage vessel, records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.
- k. For each Group 1 wastewater stream transferred off-site, record of the notice sent to the treatment operator stating that the wastewater stream contains organic HAPs which are required to be managed and treated in accordance with the provisions of 40 CFR 63, Subpart JJJ.
- l. For each Group 1 wastewater stream transferred off-site, records that the transferee has accepted the responsibility that all Group 1 wastewater streams accepted will be managed and treated in accordance with the provisions of 40 CFR 63, Subpart JJJ.
- m. Certification that the bio-treatment plant meets the requirements for an enhanced biological treatment process as defined in 40 CFR 63.145(h)(1).
- n. Records of the bio-treatment plant monitoring data required by Condition #46 as required by 40 CFR 63.147(b)(4).
- o. Group 2 wastewater stream, records required by 40 CFR 63.147(b)(8).
- p. Records of the monthly inspections required by Condition #44 and of any indication that emissions may have bypassed the scrubber.

The records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, 40 CFR 63.132(g), 40 CFR 63.147, 40 CFR 63.1326, 1328, 1330, 1331, 1332, 1335 and Condition 11 of the NSR permit dated 12/30/2003)

- 48. The permittee shall submit the following reports to demonstrate compliance with this permit. The content of and format of such reports shall be arranged with the Director, Piedmont Region. These reports shall include, but are not limited to:
 - a. Periodic Reports containing the information required by 40 CFR 63.1335(e)(6); including the information specified in 40 CFR 63.182(d) for equipment leaks subject to 40 CFR 63.1331, the information specified in 40 CFR 63.104(f)(2) for heat exchangers subject to 40 CFR 63.1328 and the information specified in 40 CFR 63.146(d)(1) for the bio-treatment plant.

These reports shall be submitted semiannually, no later than 60 days after the end of each 6-month period.

- b. Quarterly Reports for Emissions Averaging containing the information required by 40 CFR 63.1335(e)(6)(xi). These reports shall be submitted no later than 60 days after the end of each quarter.
- c. Start-up, Shutdown and malfunction Reports containing the information specified in 40 CFR 63.10(d)(5)(i). These reports shall be submitted on the same schedule as the Periodic Reports referenced in paragraph (a) of this Condition.

The records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and 40 CFR 63.1335)

FACILITY WIDE REQUIREMENTS

Certain conditions within existing NSR permits may be applicable to all newly constructed or modified equipment that receive a permit. These conditions are retained in the Title V permit because 1) they are applicable requirements generally applied to all modified and newly constructed equipment permitted through the minor NSR permit program; 2) they have an impact on the prevention of excess emissions and therefore are not environmentally insignificant; and 3) they require recordkeeping and reporting that may be included in periodic monitoring requirements. Below is a listing of these conditions from the 2003 NSR permit (the 1988 permit did not contain any such provisions):

Condition #16 of 2003 NSR permit:

- 50. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Maintain an inventory of spare parts that are needed to minimize the duration of any air pollution control equipment breakdowns.
 - c. Have available written operating procedures for the related air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at minimum.
 - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of training provided including names of trainees, date of training and nature of training.

Maintenance and training records shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-110 and Condition 16 of the NSR permit dated 12/30/20039)

This requirement will therefore be included as Condition #50 in the Facility-wide requirement section of the Title V permit.

In addition, as discussed on page 13 of this statement of basis, Condition D.4 of the 1999 Consent Order applies a facility-wide annual VOC emission limit to the entire stationary source. This requirement and associated periodic monitoring (as well as periodic monitoring for Condition #50) have been included in the facility-wide section of the Title V permit as below:

49. Emissions from the operation of the entire facility shall not exceed the limits specified below:

Volatile Organic Compounds 223.3 tons/yr

(9 VAC 5-80-110 and Condition D.4 of the 11/30/1999 Consent Order)

51. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

- a. All information (production records, emission factors, material consumption) required to demonstrate compliance with the emission limit contained in Condition #47.
- b. All records required by Condition #48.

The records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110)

Finally, the requirements of the OLD MACT were included as Condition #54 in the facility-wide section since they do not apply to any specific operating division of the facility.

54. Unless other wise specified in 40 CFR 63 Subparts A and EEEE, upon February 5, 2007, the organic liquid distribution operation shall be in compliance with all applicable provisions of 40 CFR 63, Subparts A and EEEE.

(40 CFR 63 Subparts A and EEEE and 9 VAC 5-80-110)

Obsolete Requirements

Certain conditions of the 2003 NSR permit for the source are obsolete, no longer serve any meaningful purpose, and/or are unnecessary for Title V considerations (primarily because they contain no applicable requirements). Therefore, these conditions do not appear in the Title V permit.

Conditions #1 and #2 contain general descriptive information which are not requirements and will therefore not be included in the Title V permit.

Condition #17 is not being included as an applicable requirement in the Title V permit because it is redundant. Condition T in the General Permit Condition Section of the Title V permit describes the requirements for transfer of ownership relative to the Title V permit. The transfer of ownership requirements for the NSR permit are therefore inappropriate for inclusion in the Title V permit.

Condition #14 describes VA's power to modify, rescind, reissue the permit under certain circumstances which can be considered extraneous to the Title V permit. The assumption underlying this determination is that if an NSR permit is revoked or modified through unsolicited action by DEQ, the Title V permit will be changed in a separate and independent action from the NSR change. The Title V permit will change to reflect the changes in applicable requirements brought about by the NSR change.

Condition #15 is not being included as an applicable requirement in the Title V permit because it is out-dated. The Part 70 regulations define specific inspection and entry requirements consistent with the issuance of a TITLE V permit. These requirements are described in Condition Q in the General Permit Condition Section of the Title V permit and are at least as stringent as the NSR requirements. Inclusion of this condition would be redundant and the requirements have been overtaken by the Title V (Part 70) regulations.

Conditions #12 and #13 are not being included as applicable requirements in the Title V permit because similar provisions are included in the Conditions E and F in the General Permit Condition Section of the Title V permit and are included as part of the malfunction reporting requirements for the overall permit. Including these conditions as a separate enforceable condition on the permitted equipment in addition to the entire listing of equipment covered by the TITLE V permit creates a situation where conditions are both redundant and confusing.

Conditions #18 and #19 will not be included in the Title V permit because they contain no specific requirements, are environmentally insignificant or made redundant by General Condition S of the Title V permit.

Condition #5 will not be included in the Title V permit because the testing port provisions it contains are made redundant by Condition #50 (Facility-Wide Section) of the Title V permit.

As stated in page 12 of this statement of basis, similar conditions from the 1988 NSR permit were not included in the Title V permit for the same reasons as stated above.

Streamlined Requirements

No streamlined requirements have been identified.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by 2.1-20.01:2 and 2.1-20.01:1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

This general conditions cites the entire Article(s) that follow:

- B.2. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. [Federal Permits for Stationary Sources](#)
- B.3. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. [Federal Permits for Stationary Sources](#)

This general condition cites the sections that follow:

- B. 9 VAC 5-80-80. "Application"
- B.2. 9 VAC 5-80-150. "Action on Permit Applications"
- B.3. 9 VAC 5-80-80. "Application"
- B.4. 9 VAC 5-80-80. "Application"
- B.4. 9 VAC 5-80-140. "Permit Shield"

B.5. 9 VAC 5-80-80. "Application"

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excesses emissions reporting within 4 hours. Section 9 VAC 5-80-250 also requires malfunction reporting; however, reporting is required within 2 days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to this section including Title 5 facilities. Section 9 VAC 5-80-250 is from the Title 5 regulations. Title 5 facilities are subject to both Sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within 4 day time business hours of the malfunction.

Please note there are proposed regulation changes that could affect this condition. The requirement listed in section 9 VAC 5-20-180 to report excesses emissions within 4 business hours may be changed to require reporting of excess emissions within 6 hours.

This general condition cites the sections that follow:

F. 9 VAC 5-40-50. Notification, Records and Reporting

F. 9 VAC 5-50-50. Notification, Records and Reporting

U. Failure/Malfunction Reporting

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in section 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

U.2.d. 9 VAC 5-80-110. Permit Content

U.2.d. 9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

STATE ONLY APPLICABLE REQUIREMENTS

None identified

FUTURE APPLICABLE REQUIREMENTS

None identified.

INAPPLICABLE REQUIREMENTS

No inapplicable requirements identified.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, record keeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110. The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted	Rated Capacity (5-80-720 C)
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			(5-80-720 B)	
0105	Polymer Plant L1 Monomer Filter Vent	5-80-720 B	VOC	
0106	Polymer Plant L2 Monomer Filter Vent	5-80-720 B	VOC	
0107	Polymer Plant L3 Monomer Filter Vent	5-80-720 B	VOC	
0108	Polymer Plant L4 Monomer Filter Vent	5-80-720 B	VOC	
0111	Polymer Plant L1 Chip Water Dryer Vent	5-80-720 B	PM/PM10	
0112	Polymer Plant L2 Chip Water Dryer Vent	5-80-720 B	PM/PM10	
0113	Polymer Plant L3 Chip Water Dryer Vent	5-80-720 B	PM/PM10	
0114	Polymer Plant L4 Chip Water Dryer Vent	5-80-720 B	PM/PM10	
0135	Fores Tank	5-80-720 B	VOC	
0140	Polymer Plant Caustic Tank	5-80-720 B	VOC	
0141	Dowtherm Tank	5-80-720 B	VOC	
0153	Still #1 Seal Pot Vent	5-80-720 B	VOC	
0154	Still #2 Seal Pot Vent	5-80-720 B	VOC	
0162	Polymer QC Lab Hood	5-80-720 B	VOC	
0163	Polymer QC Lab Hood	5-80-720 B	VOC	
0164	Polymer QC Lab Hood	5-80-720 B	VOC	
0165	Polymer QC Lab Hood	5-80-720 B	VOC	
0166	Autoclave Agitator Motor Air Vent	5-80-720 B	VOC	
0167	Autoclave Agitator Motor Air Vent	5-80-720 B	VOC	
0168	Autoclave Agitator Motor Air Vent	5-80-720 B	VOC	
0169	Autoclave Agitator Motor Air Vent	5-80-720 B	VOC	
0170	Ball Mill/Slurry Room Exhaust	5-80-720 B	VOC	
0171	Polymer Maintenance Shop Room Vent	5-80-720 B	PM/PM10	
0172	Polymer Shop Welding Hood Vent	5-80-720 B	PM/PM10	
0174	Catalyst Prep room Hood	5-80-720 B	VOC	
0175	Blue Dye Exhaust Hood	5-80-720 B	VOC	
0176	Syloid Mix Area	5-80-720 B	PM/PM10	
0178	Propane Tank	5-80-720 B	VOC	
2042	B83 Crystallizer Cyclone	5-80-720 B	PM/PM10	
2043	Truck Loading Station Cyclone	5-80-720 B	PM/PM10	
7007	Pack Shop Pump Room , 1 st Floor	5-80-720 B	VOC	

7008	Pack Shop Pump Room, 2 nd Floor	5-80-720 B	VOC	
4471	L44 Extruder Area Vent #1	5-80-720 B	PM/PM10	
4472	L44 Extruder Area Vent #2	5-80-720 B	PM/PM10	
4572	L45 Latex Prep. Room	5-80-720 B	VOC	
4573	L45 Latex Room Flex Vent	5-80-720 B	VOC	
4641	L46 Web Slitting and Edge Trim Exhaust	5-80-720 B	PM/PM10	
4764	L47 Lab Hood Exhaust	5-80-720 B	VOC	
4765	L47 QC Lab Oven Vent	5-80-720 B	VOC	
3001- 3019	Reclaim Chip Bunkers #1- 19	5-80-720 B	PM/PM10	
3020	Chip Transfer Cyclone	5-80-720 B	PM/PM10	
6061- 6065	Pelletizer Chip Water Dryers	5-80-720 B	PM/PM10	
6076	Railcar/Truck Chip Transfer	5-80-720 B	PM/PM10	
6075	Flake and Fines Box-Out	5-80-720 B	PM/PM10	
1021	Fuel Oil Tank #1	5-80-720 B	VOC	
1022	Fuel Oil Tank #2	5-80-720 B	VOC	
1023	Utilities Caustic Tank	5-80-720 B	VOC	
1024	Sodium Hypochlorite Tank	5-80-720 B	VOC	
1025	Sodium Hypochlorite Tank	5-80-720 B	VOC	
9060	P6 Slitter Blade Exhaust	5-80-720 B	PM/PM10	
9080	P8 Slitter Blade Exhaust	5-80-720 B	PM/PM10	
9090	P9 Slitter Blade Exhaust	5-80-720 B	PM/PM10	
9100	P10 Slitter Blade Exhaust	5-80-720 B	PM/PM10	
9110	P11 Slitter Blade Exhaust (blade)	5-80-720 B	PM/PM10	
9111	P11 Slitter Blade Exhaust (web cleaner)	5-80-720 B	PM/PM10	
9112	P11 Slitter Blade Exhaust (motor cooling)	5-80-720 B	PM/PM10	
9120	P12 Slitter Blade Exhaust (blade)	5-80-720 B	PM/PM10	
9121	P12 Slitter Blade Exhaust (web cleaner)	5-80-720 B	PM/PM10	
9122	P12 Slitter Blade Exhaust (motor cooling)	5-80-720 B	PM/PM10	
9123	P12 Slitter Main Drive	5-80-720 B	PM/PM10	
9130	P13 Slitter Blade Exhaust (blade)	5-80-720 B	PM/PM10	
9131	P13 Slitter Blade Exhaust (cabinet)	5-80-720 B	PM/PM10	
9132	P13 Slitter Corona Treater	5-80-720 B	VOC	
9510	P8-10 Slitter Edge Trim Cyclone	5-80-720 B	PM/PM10	
9520	Core Cutter	5-80-720 B	PM/PM10	
8000	Innovation Center (I.C.) Ball Mill A	5-80-720 B	PM/PM10	
8001	I.C. Ball Mill B	5-80-720 B	PM/PM10	

8002	I.C. 1 st Floor Fume Hoods	5-80-720 B	VOC	
8003	I.C. 2 nd Floor Fume Hoods	5-80-720 B	VOC	
8004	I.C. Maintenance Shop	5-80-720 B	PM/PM10	
8005	I.C. Ball Mill Flex Vent	5-80-720 B	VOC	
8006	I.C. Eductor Hood 1" Extruder	5-80-720 B	VOC	
8007	I.C. Instrument Hood	5-80-720 B	VOC	
8008	I.C. Technical Dryer Vent	5-80-720 B	VOC	
8010	I.C. Storage Building Flex Line	5-80-720 B	VOC	
8021	Tech Service Wet Lab	5-80-720 B	VOC	
8022	Tech Service High Bay	5-80-720 B	VOC	
8023	Tech Service Solvent Storage Exhaust	5-80-720 B	VOC	
8031	Film QC Lab	5-80-720 B	VOC	
8032	Main Latex Stirrer	5-80-720 B	VOC	
8033	Main Latex Tank	5-80-720 B	VOC	
8034	L40/L45 Stirrer	5-80-720 B	VOC	
8035	L40/L45 Flex Line	5-80-720 B	VOC	
8036	L40/L45 Lab Hood	5-80-720 B	VOC	
7001	Filter Shop Sump	5-80-720 B	VOC	
7002	Pack Shop Caustic Tank	5-80-720 B	VOC	
7005	Die Shop Sink Feed	5-80-720 B	VOC	
7006	Die Shop A/C Hood	5-80-720 B	VOC	
7021	Ultrasonic Cleaner	5-80-720 B	PM/PM10	
7022	Main Shop Welding	5-80-720 B	PM/PM10	
7023	Forktruck Battery Hood (West)	5-80-720 B	VOC	
7024	Forktruck Battery Hood (East)	5-80-720 B	VOC	
4041	L40 Corona Treater	5-80-720 B	VOC	
4312	L43 Crystallizer – Steam	5-80-720 B	PM/PM10	
4341	L43 Corona Treater	5-80-720 B	VOC	
4441	L44 Corona Treater	5-80-720 B	VOC	
4613	L46 Crystallizer – Steam	5-80-720 B	PM/PM10	
4741	L47 Corona Treater	5-80-720 B	VOC	
0119A-D	Polymer Plant Hold Up Hoppers (one for each polymer line; only 119D (L4) has an external vent		PM/PM10	
0115- 0118	Four (4) Polymer Chip Blenders (one for each polymer line)	5-80-720 B	PM/PM10	

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The draft permit went to public notice in the Richmond Times-Dispatch on October 15, 2004. The 30-day comment period specified in the public notice ended on November 14, 2004. No public comments were received. In addition, the public notice specified that the draft permit was being submitted to EPA Region III for concurrent review. The 45-day EPA review period ended on November 29, 2004. No EPA comments were received.